Available online at www.sciencedirect.com

ScienceDirect

Procedia - Social and Behavioral Sciences 114 (2014) 744 – 748

Procedia
Social and Behavioral Sciences

4th World Conference on Psychology, Counselling and Guidance WCPCG-2013

Grade repetition risk for Indigenous students in early schooling in Queensland, Australia

Dr Robyn Anderson

JCU Singapore, 600 Upper Thomson Rd, Singapore 574421

Abstract

This paper presents an analysis of the most recent grade repetition data accessed through Queensland's state education department, the Department of Education, Training and Employment (DETE). Relative risk ratio was the method used to analyse the data and assess the relative risk of grade repetition for Indigenous students who are more often disadvantaged in education. Findings show that Indigenous students are overrepresented in grade repetition in all year levels of early schooling (Prep to Year 3). Contributing factors to the disproportionate over-representation of Indigenous students in early grade repetition are discussed and recommendations for policy are suggested.

Selection and peer-review under responsibility of Academic World Education and Research Center.
Keywords: Grade repetition, Indigenous students, early intervention, school readiness;

1. Introduction

Grade repetition (sometimes called grade retention or 'repeating' a year level) refers to an intervention practice whereby students are held back for a year at school rather than being promoted to the next year level along with their same-age peers. It has been used in schools worldwide including Queensland schools (Australia) to address students' low levels of preparedness for school or school failure (Anderson, 2008). The study thus examines the most recent grade repetition data from the Queensland Government's Department of Education, Training and Employment (DETE, 2012). While grade repetition has been widely used in Queensland state schools to better prepare students for school or for the following year level, a volume of research has shown that grade repetition provides few benefits for students (Cannon & Lipscomb, 2011; Hong, & Raudenbush, 2005; Hong & Yu, 2006; Hughes, Chen, Thoemmes, & Kwok, 2010; Jimerson, 2001, 2004; McGrath, 2006; Poland, 2009) and may be harmful (Jimerson, 2001, 2004). A further concern is that grade repetition may be offered to students already considered disadvantaged in the schooling system, such as Indigenous students (APN Educational Media, 2011). The study thus seeks to understand whether Indigenous students are at greater risk than non-Indigenous students of repeating a year level in early schooling. The paper first considers the current literature on grade repetition and the achievement of Indigenous students. This is followed by the methodology, findings, discussion and conclusion and recommendations.

Corresponding Author: Dr Robyn Anderson. Tel.: +65-8268 1426
E-mail address: robyn.anderson@jcu.edu.au

Selection and peer-review under responsibility of Academic World Education and Research Center.
doi:10.1016/j.sbspro.2013.12.778

2. Literature review

The first section of the literature considers the effects of grade repetition on student achievement, social and emotional adjustment and groups of students more often repeated. The second section discusses school achievement of Indigenous students, who more often have lower levels of school achievement and thus may be at greater risk of grade repetition.

2.1. Grade repetition

Educators and policy makers have long embraced this intervention practice in an attempt to improve educational outcomes for low-achieving students or students who may be considered 'unready' for school. However, grade repetition has found limited long-term support in research (Hong, & Raudenbush, 2005; Hong & Yu, 2006; Hughes, Chen, Thoemmes, & Kwok, 2010; Jimerson, 2001, 2004). The National Association of School Psychologists (NASP) in the United States argues in their *Position Statement* on grade retention:

> Research examining the overall effects of 19 empirical studies conducted during the 1990s compared outcomes for students who were retained and matched comparison students who were promoted. Results indicate that grade retention had a negative impact on all areas of achievement (reading, math, and language) and socio-emotional adjustment (peer relationships, self-esteem, problem behaviours, and attendance) (p. 2).

Brophy further argues that many American studies "converge on the conclusion that school-imposed grade repetition is counter-productive" (2006, p. 14). Jimerson, who has researched extensively in the area of grade repetition in the United States, similarly argues that "the confluence of results from educational research warrant serious consideration" of grade repetition practices (2004, p. 72).

Concerns regarding grade repetition generally relate to two main dimensions: a) the effects on students' academic achievement, and b) the effects on students' socio-emotional development. Recommendations to repeat at the pre-schooling level are more often based on a student's intellectual or social maturity whereas recommendations to repeat during early schooling are more often based on student achievement (Anderson, 2008; Brophy, 2006). Research conducted in the United States over several decades regarding the effects of grade repetition in early grades shows no evidence of benefits to retainees' cognitive development or later academic achievement (Hong & Yu, 2006; Xia & Kirby, 2009) and may have negative effects on students' self-esteem, peer relationships and attitudes towards school (Brophy, 2006; Jimerson, 2004; Shephard, 2004; Smith & Shepard, 1988) leading to a significantly increased later risk of later school dropping-out (Jimerson, 2004).

Among particular groups of students who are more likely to be repeated in early schooling are boys (Hong & Raudenbush, 2005, McGrath, 2006, NASP, 2003) and students from minority groups (NASP, 2003). One such group of minority group students in Australia is Indigenous students.

2.2. School achievement of Indigenous students

Indigenous Australian students have long been considered disadvantaged in education (APN Educational Media, 2011). The Queensland Government Department of Education and Training (DET) report in 2009, *Closing the Gap: Education Strategy*, revealed that school achievement of Indigenous students drawn from NAPLAN[i] tests show that the "percentage of students estimated to be working at or above the national minimum standard is markedly lower for Indigenous students than non-Indigenous students in all jurisdictions" (Australian Curriculum Assessment and Reporting Authority [ACARA], 2010, p. 63).

To address school achievement and readiness concerns, the Queensland state education department, currently known as the Department of Education, Training and Employment (DETE) has directed considerable attention to better preparing all children for school, including Indigenous children, by introducing a full-time Prep year in 2007 (Queensland Studies Authority, 2006). However, Dockett, Mason and Perry in their studies of Aboriginal students in New South Wales, Australia, (2006) found that Indigenous students are less likely to participate in pre-schooling than their non-Indigenous peers. This finding is similar to the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA)'s findings (2000), Taylor's findings (2004) in the Thamarrurr Region in the Northern Territory, and Anderson's findings in a study in schools in North Queensland (2008). If Indigenous students have lower levels of readiness for school than non-Indigenous students because of their lower levels of pre-school participation, they may be at risk of being offered an intervention practice such as grade repetition which

studies have shown to offer few benefits and may be harmful (Jimerson, 2001, 2004).

3. Method

Secondary data was collected from an existing large-scale data set belonging to the Queensland Government's Department of Education, Training and Employment (DETE)'s in-house database, *Corporate Data Warehouse* (2012) following a formal application to DETE and an Ethics Approval from James Cook University. The most recent grade repetition data available up to and including 2011 was collected in late 2012. As the study focused on early intervention practices, data collection was limited to students aged 5 to 8 years, students most likely to be in grades Prep to Year 3, which are the officially recognized early childhood education years in Queensland state schools (Queensland Studies Authority [QSA], 2006). Data analysis focused on grade repetition rates for students aged 5 and 8 years in all Queensland state schools to uncover grade repetition trends in the early schooling, and in particular, the possible risk of grade repetition for Indigenous students.

Three primary measures were used to analyse the overrepresentation and proportional discrepancy between groups and included the composition index, the risk index and the relative risk ratio (Graham, 2011). The composition index is the percentage of students within a category represented (e.g. repeated Indigenous students) and is calculated by dividing the number of repeated students by the total number of all students repeated in that category. The risk index is the percentage of students within a particular category and is calculated by dividing the number of students (e.g. repeated Indigenous students) by the total number of possible students in that category (e.g. Indigenous students). The relative risk ratio is used to compare the risk of being repeated between groups and is calculated by dividing the risk index of one group by another (e.g. the risk index for Indigenous students divided by risk index for non-Indigenous students).

4. Findings

Tables 1 to 3 represent repeated Indigenous and non-Indigenous students aged 5 to 8 years in Queensland state schools in 2011. Table 1 shows that while Indigenous students represented 8.82 percent of the total state-wide enrolment of students 5 to 8 years, they represented 12.59 percent of repeated students.

Table 1. Repeated Indigenous and Non-Indigenous students Aged 5 to 8 Years 2011

Repeated students 2011 Aged 5-8 Years	**Total Enrolments**		**Students Repeated**		
	N	% of Total Enrolment	N	State-wide Risk Index %	State-wide Composition Index%
Indigenous students	3752	8.82	134	3.54	12.59
Non-Indigenous students	38779	91.18	930	2.40	87.41
Total	**42531**	**100**	**1064**	**2.50**	**100**

Table 2 shows composition indexes of repeated Indigenous and non-Indigenous students aged 5 to 8 years in Queensland state schools in 2011. The composition indexes for repeated Indigenous students in Table 2 were higher for all age levels (5 -8 years) than the total enrolments (Table 1).

Table 2. Composition indexes of repeated Indigenous and Non-Indigenous students aged 5 to 8 years 2011

Age	**Total Repeated**		**Indigenous students**		**Non-Indigenous students**	
	N	Composition Index %	N	Composition Index %	N	Composition Index %
5 Years	498	46.80	64	12.85	434	87.15
6 Years	296	27.82	36	12.16	260	87.84
7 Years	147	13.82	19	12.93	128	87.07
8 Years	123	11.56	15	12.20	108	87.80

Total	**1064**	**100**	**134**	**12.59**	**930**	**87.41**

Table 3 shows the relative risk ratios calculated from the risk ratios of both Indigenous and non-Indigenous repeated students aged 5 to 8 years in Queensland state schools in 2011. Indigenous students are at greater risk than non-Indigenous students at all early childhood ages, 5 to 8 which approximates to year levels, Prep to Year 3.

Table 3. Relative risk ratios of repeated Indigenous and Non-Indigenous students aged 5 to 8 years 2011

Students Aged 5-8 Years	Indigenous Risk Index %	Non-Indigenous Risk Index %	Relative Risk Ratio %
5 Years	1.71	1.12	1.53
6 Years	0.96	0.67	1.43
7 Years	0.51	0.33	1.55
8 Years	0.40	0.29	1.40
Total	**3.58**	**2.41**	**1.48**

5. Discussion

Although Indigenous students aged 5-8 years represented 8.82 percent of the total enrolment as seen in Table 1, they represented 12.59 percent of all students who were repeated as shown in Table 2. As the total relative risk ratio in Table 3 shows, Indigenous students were at greater risk of being repeated than non-Indigenous students at each age level (ages 5-8 years) which approximates to every year level of early schooling (Prep - Year 3). Two explanations for Indigenous students' over-representation in grade repetition rates in early schooling are offered.

The first explanation relates to Indigenous students' lower levels of participation in pre-school. The Australian Bureau of Statistics (ABS) indicates that 45.9 percent of Indigenous students participated in pre-schooling compared with 56.9 percent of non-Indigenous students in data collected in 2001 (2004). Indigenous students lower levels of pre-school participation compared to Non-Indigenous students have been further documented in other studies (Anderson, 2008; Dockett, Mason & Perry, 2006). Pre-school, particularly Prep, the year before formal schooling, lays the foundation for later formal learning at school; thus it is an important first step in formal schooling. As it is not compulsory, not all students, including many Indigenous students, attend Prep (Anderson, 2008). Students who have not attended Prep may be considered 'unready' for school and may be repeated (Anderson, 2008).

The second explanation relates to Indigenous students' prior-to-school learning experiences which may be less compatible with readiness expectations at school and the learning experiences of the more dominant groups such as non-Indigenous students. If such students are considered 'unready' for school they may be at greater risk of repeating a grade. Mills (2008) suggests that teachers may unintentionally be placing more value on the competencies of the dominant groups. If Indigenous student's prior-to-school experiences are therefore taken into account and valued as a resource on which to build further learning at school, Indigenous students may have the same learning opportunities as non-Indigenous students (Dockett et al., 2006; Mills, 2008). *The National Statement of Principles and Standards for More Culturally Inclusive Schooling in the 21st Century* suggests that a curriculum and program should be provided for young Indigenous students that avoids discrimination, allows children to have the same learning opportunities as non-Indigenous students within their cultural beliefs and practices and enables them to understand their own knowledge and cultures (Ministerial Council on Education, Employment, Training and Youth Affairs [MCEETYA], 2000).

6. Conclusion and recommendations

This study has shown that Indigenous students are at greater risk of being offered an intervention practice such as grade repetition in early schooling than non-Indigenous students to ensure they are ready for, and succeed at school. When such students who are already considered 'at risk' in education are then offered an intervention practice such as grade repetition which decades of research has shown little support (Jimerson, 2004; Shepherd, 2004), it is an even greater concern. The study thus recommends that the non-compulsory Prep year in Queensland be made compulsory and become the first year of schooling to ensure that all children might fully participate in a foundation year of schooling. The study also recommends that the intervention practice of grade repetition be replaced by alternative strategies which might include valuing and beginning with students' prior learning experiences to support their learning at school. Finally, the study recommends that teachers place more value on the competencies that all

children, and particularly Indigenous children, bring to school so that they might feel valued, supported, and will more likely succeed at school and less likely to repeat a year level at school.

References

Anderson, R. (2008). *Ready, Set, Don't go: Pre-school retention practices that restrict children's access to school.* Unpublished PhD dissertation, James Cook University of North Queensland, Townsville, Queensland, Australia.

APN Educational Media (2011). Bush kids battle to reach benchmarks. *Education Review,* August, 5-5.

Australian Bureau of Statistics. (2004). *Australian Social Trends, 2004: Participation in education: Attending preschool,* Cat. no. 4102.0. Retrieved May 4, 2007, from http://www.abs.gov.au

Australian Curriculum Assessment and Reporting Authority (ACARA) (2010). *National report for 2010.* Retrieved August 16, 2011, from http://www.nap.edu.au/_Documents/National%20Report/NAPLAN_2010_National_Report.pdf

Brophy, J. (2006). *Grade repetition*. Paris/Brussels: International Academy of Education/International Institute for Educational Planning.

Canon, J.S., & Lipscomb, S. (2011). Early Grade Retention and Student Success Evidence from Los Angles. Retrieved August 11, 2011, from http://www.ppic.org/content/pubs/report/R_311JCR.pdf

Department of Education and Training (DET) (2009). *Closing the gap: Education strategy*. Retrieved August 16, 2011, from http://deta.qld.gov.au/indigenous/pdfs/ctg-addendum-14032011.pdf

Department of Education, Training and Employment (DETE) (2012). *Corporate data warehouse: Grade repetition.*

Dockett, S., Mason, T., & Perry, B. (2006). Successful transition to school for Australian aboriginal children. *Childhood Education, 82*(3), 139-145.

Graham, L. J. (2011). Disproportionate over-representation of Indigenous students in New South Wales government Schools for Specific Purposes. *Cambridge Journal of Education, 42*(2), in press.

Hong, G., & Raudenbush, S. (2005). Effects of kindergarten retention policy on children's cognitive growth in reading and mathematics. *Education Evaluation and Policy Analysis, 27*(3), 205-224.

Hong, G., & Yu, B. (2006). *Kindergarten retention and children's cognitive growth in reading and mathematics: Four years of follow-up.* Paper presented at the Public Policies and Child Well-Being Conference, Evergreen Marriott Conference Centre, Stone Mountain Park, Atlanta, GA, May 15-16, 2006.

Hughes, J. N., Chen, Q., Thoemmes, F., & Kwok, O. (2010) An investigation of the relationship between retention in first grade and performance on high stakes test in 3rd grade. Educational *Evaluation and Policy Analysis, 32,* 166–182.

Jimerson, S. R. (2001). Meta-analysis of grade retention research: Implications for practice in the 21st century. *School Psychology Review, 30*(3), 420-437.

Jimerson, S. R. (2004). Is grade retention educational malpractice? Empirical evidence from meta-analyses examining the efficacy of grade retention. In H. J. Walberg, A. J. Reynolds & M. C. Wang (Eds.), *Can unlike students learn together? Grade retention, tracking, and grouping* (pp. 71-96). Greenwich, CT: Information Age Publishing.

National Association of School Psychologists (2003). *NASP Position statement: Student grade retention and social promotion.* Retrieved 9 April, 2013, from http://www.nasponline.org/about_nasp/positionpapers/StudentGradeRetention.pdf

McGrath, H. (2006). To repeat, or not to repeat. *WAPPA words (Western Australia Primary Principals' Association, Perth), 26*(2), 39-46.

Mills, C. (2008).Making a difference: moving beyond the superficial treatment of diversity.*Asia-Pacific Journal of Teacher Education*, *36*(4), 261-275.

Poland, S. (2009). Grade retention: School districts are leaving too many children behind. *District Administration*. Retrieved May 19, 2011, from http://www.districtadministration.com/viewarticle.aspx?articleid=2212

Queensland Studies Authority (2007). *Early years: Curriculum guidelines.* Retrieved May 7, 2007, from http://www.qsa.qld.edu.au/early/curriculum_guidelines/index.html

Reynolds, A. J. (1992). Grade retention and school adjustments: An explanatory analysis. *Educational Evaluation and Policy Analysis, 14*(2), 101-121.

Shepard, L. A. (2004). Understanding research on the consequences of retention. In H. J. Walberg, A. J. Reynolds & M. C. Wang (Eds.), *Can unlike students learn together? Grade retention, tracking, and grouping* (pp. 183-202). Greenwich, CT: Information Age Publishing.

Smith, M. L., & Shepard, L. A. (1988). What doesn't work. *Set, 2*(2), 2-7.

Taylor, J. (2004). *Social indicators for Aboriginal governance: Insights from the Thamarrurr Region, Northern Territory, Research Monograph no. 24*. Canberra, ACT: Centre for Aboriginal Economic Policy Research, Australian National University.

Xia, N., & Kirby, S. N. (2009). *Retaining Students in Grade: A Literature Review of the Effects of Retention on Students' Academic and Nonacademic Outcomes*. Santa Monica, CA: RAND Corporation. Retrieved August 11, 2011, from http://www.rand.org/content/dam/rand/pubs/technical_reports/2009/RAND_TR678.pdf